

EXHIBIT 1

[Counsel listed on signature page]

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

IN RE HIGH-TECH EMPLOYEE
ANTITRUST LITIGATION

THIS DOCUMENT RELATES TO:
ALL ACTIONS

Master Docket No. 11-CV-2509 LHK

**DEFENDANTS' OPPOSITION TO
SUPPLEMENTAL CLASS
CERTIFICATION MOTION**

Date: August 8, 2013
Time: 1:30 pm
Courtroom: 8, 4th Floor
Judge: The Honorable Lucy H. Koh

PUBLIC REDACTED VERSION

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Order Granting in Part, Denying in Part Motion for Class Certification	Order ____
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Expert Report of Edward E. Leamer, Ph.D. (October 1, 2012)	Leamer I ¶ ____
Expert Report of Professor Kevin M. Murphy (November 12, 2012)	Murphy I ¶ ____
Expert Witness Report of Kevin F. Hallock (May 10, 2013)	Hallock ¶ ____
Supplemental Expert Report of Edward E. Leamer, Ph.D. (May 10, 2013)	Leamer II ¶ ____
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Deposition of Edward E. Leamer (October 26, 2012 and June 11, 2013)	Leamer ____
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Deposition of Chris Galy (March 20, 2013)	Galy ____
Deposition of Danny McKell (March 20, 2013).....	McKell ____
Deposition of George Lucas (March 28, 2013)	Lucas ____
Declaration of Danny McKell (Exhibit 17 to the Brown Declaration filed November 12, 2012)	McKell Decl. ____

1 **I. INTRODUCTION**

2 In denying the motion to certify a class, the Court held that Plaintiffs failed “to provide
3 adequate support for, or confirmation of, [Leamer’s] theory that there was a rigid wage structure
4 such that an impact to some of Defendants’ employees would necessarily have resulted in an
5 impact to all or nearly all employees.” Order at 43. In granting Plaintiffs a second chance, the
6 Court required persuasive, “properly analyzed, reliable evidence” that the alleged conspiracy
7 caused compensation reductions that “would have been felt not only by employees who would
8 have been recruited, but by all employees [class]-wide.” *Id.* at 21, 18-19 (citation omitted).

9 Plaintiffs’ response falls far short of this required showing. Despite a mountain of
10 discovery taken since the last motion, Plaintiffs cannot support their “theory of a rigid, linked
11 wage structure” (*id.* at 36 n.11) with the rigor and convincing proof required by Rule 23.
12 *Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1432 (2013). Nothing in the additional depositions
13 or documents remotely supports the existence of compensation structures in which raises for
14 some employees would “ripple” across all 2,536 varied job titles and 61,666 diverse employees in
15 the proposed class at seven very different companies.

16 Nor does Leamer’s new report carry Plaintiffs’ burden. Each analysis in his report relies
17 on compensation *averages* that deliberately mask the individual variations at the heart of the
18 question raised by the Court’s Order. Observing that average compensation for a job title has
19 increased says nothing about the distribution of the increase among employees; for example,
20 average compensation for a job title increases if just one employee out of the hundreds in a job
21 title gets a raise. Yet Leamer relies on compensation averages for job titles and firms to conclude
22 that wage increases are “shared,” even though the actual data show wide variations in pay raises
23 and cuts for individual employees. Because averaging ignores such individual variations, courts
24 have rejected this approach as a way to show the predominance of common issues for purposes of
25 class certification. *See, e.g., In re Graphics Processing Units Antitrust Litig. (“GPU”),* 253
26 F.R.D. 478, 494 (N.D. Cal. 2008); *Reed v. Advocate Health Care*, 268 F.R.D. 573, 590-92 (N.D.
27 Ill. 2009).

28 Leamer (who is not a labor economist) understood the Court’s question required a focus

1 on individual data (Leamer 784:7-17), but he rejected that approach (*id.* at 537:5-15, 575:12-
 2 576:7). Leamer explains that “individual data is likely to be dominated by forces that operate at
 3 the individual level” (Leamer II ¶ 19), and insists that individual compensation variation does not
 4 matter “for this exercise.” Leamer 667:3-12; *see also id.* at 537:5-15, 575:12-576:7. But
 5 individual compensation variation is precisely what matters. As Judge Alsup held in similar
 6 circumstances, it is Plaintiffs’ “burden to show that individual differences . . . *could* be accounted
 7 for, *not* that individual differences could be ignored.” *GPU*, 253 F.R.D. at 494 (emphasis in
 8 original).

9 To address the Court’s question, Defendants’ expert, Kevin Murphy—whom Leamer
 10 recognizes as a “preeminent” labor econometrician (Leamer 608:4-7)—examined the
 11 compensation histories of individual employees. The results show highly individualized
 12 compensation patterns that belie the existence of the rigid wage structures required to support
 13 Plaintiffs’ theory of classwide impact. Whether the data are analyzed at the firm or job title level,
 14 there are enormous variations in individual compensation. Employees with the same job title
 15 routinely receive compensation decreases of 20% or more in the same year when other employees
 16 in that title receive pay increases of 20% or more. By averaging compensation and ignoring these
 17 individual differences between employees, Plaintiffs do not meet their burden.

18 The flaws in Leamer’s analyses go beyond reliance on averaging. Leamer admits he has
 19 no method to explain how changes in compensation could actually be translated across a firm.
 20 Leamer 659:2-4, 659:23-660:3. Nor can he point to a single instance in which a ripple effect
 21 occurred for any reason, despite the fact that cold calling, recruiting, and hiring from many
 22 different sources—including among Defendants— took place “each and every day” before,
 23 during, and after the class period. *Id.* at 722:19-723:4, 828:13-21. Leamer’s hypothesis is that
 24 “internal equity” and a “somewhat rigid wage structure” at each Defendant caused “sharing” of
 25 compensation changes among class members. But his analyses cannot determine whether his
 26 average correlations are explained by factors operating at the firm level having nothing to do with
 27 “sharing,” such as a Pixar firm-wide bonus, an Intel pay freeze, or similar circumstance. *Id.* at
 28 743:6-12, 838:22-839:12; Murphy II ¶¶ 12, 37-38. Thus, aside from their fatal reliance on

1 average compensation, Leamer's new correlation and regression results prove nothing relevant to
 2 classwide impact because they would produce the same results if his "sharing" hypothesis is false.
 3 Leamer 528:7-16, 695:3-6, 703:21-704:11, 723:11-14, 840:6-13, 841:4-11; Murphy II ¶¶ 31, 43-
 4 44; *see* Order at 36-38 (finding Leamer's charts "consistent" with two opposite conclusions).

5 Ultimately, Leamer admits the impact, if any, of a reduction in cold calling on class
 6 members "would depend" on the "case-by-case" circumstances of each class member, what
 7 information she would have received, and her manager's exercise of discretion, none of which he
 8 has considered. Leamer 503:25-504:10, 543:7-544:25, 620:18-621:5, 624:25-625:15, 628:19-
 9 630:4, 690:5-15. For the Technical Class, 11,850 different managers exercised their discretion to
 10 set compensation based on their evaluations of each employee. Because individual factual issues
 11 would vastly overwhelm any common questions, the Technical Class cannot be certified.

12 Perhaps recognizing that Leamer cannot support their theory, Plaintiffs offer a new expert,
 13 Kevin Hallock. He makes the unremarkable observation that each Defendant used "formal and
 14 structured compensation systems" and "principles of internal equity." Yet the most Hallock can
 15 say is these systems "could" "potentially" (not "would," as Plaintiffs say) "lead to systematic pay
 16 effects." Hallock ¶¶ 195-96, 201, 224, 227, 229; Mot. at 13. Hallock was not even asked to
 17 consider whether any "systematic pay effects" actually occurred or whether the "pay structures"
 18 were sufficiently rigid to support Leamer's theory. *See* Hallock 22:22-23:20.

19 Finally, Plaintiffs spend pages reciting evidence of the alleged agreements, the Northern
 20 California film community, and the late Steve Jobs' alleged personality traits. But despite
 21 reviewing thousands of additional documents and taking nearly 50 more depositions of CEOs and
 22 other executives, Plaintiffs only offer the same kind of evidence about the existence and alleged
 23 purposes of the agreements that the Court already examined at length and found insufficient as
 24 common proof of impact. Order at 21-33. None of that evidence speaks to the Court's question
 25 of whether Defendants had such rigid wage structures "that an impact to some of Defendants'
 26 employees would necessarily have resulted in an impact to all or nearly all employees." *Id.* at 43.

27 The individualized nature of each employee's compensation is precisely why courts have
 28 denied class certification in wage suppression cases like this, even where the proposed class was

1 much smaller and far more homogeneous and even in industries characterized by “structured”
 2 compensation. *See, e.g., Reed*, 268 F.R.D. at 582, 592 (denying certification of class of Chicago
 3 nurses despite plaintiffs’ claim that defendants used a “fixed pay structure” and “wage grid” to set
 4 nursing wages). Plaintiffs ignore these decisions in their new motion. Because Plaintiffs have
 5 failed again to show there is common proof that “a suppression of wages to some employees
 6 would have affected all or nearly all Class members” (Order at 45), and for all the other reasons
 7 previously advanced by Defendants, certification should be denied.¹

8 **II. PLAINTIFFS AGAIN FAIL TO SHOW THAT AN IMPACT TO SOME**
 9 **EMPLOYEES FROM THE ALLEGED CONSPIRACY WOULD NECESSARILY**
 10 **HAVE HAD AN IMPACT ON ALL OR NEARLY ALL CLASS MEMBERS**

11 **A. Leamer’s Analysis Fails Because It Ignores Individualized Variations And**
 12 **His Results Do Not Support Plaintiffs’ Theory Of Classwide Impact**

13 The Court found Leamer’s prior statistical analyses insufficient to show classwide impact
 14 because, at most, each showed only average or overall effect without demonstrating that a
 15 reduction in compensation for some would affect substantially all class members. Leamer’s
 16 Conduct Regression was a method only to show “generalized harm” and “class-wide damages,”
 17 not to show that the “effects of the anti-solicitation agreements would have spread to all or almost
 18 all employees.” Order at 34. Leamer’s “Common Factors Analyses” were inadequate because
 19 they showed, at best, “that factors such as where an employee works and what an employee does
 20 play a large role in determining the employee’s salary,” without demonstrating that the alleged
 21 agreements had an effect common to the class. *Id.* at 36. Finally, Leamer’s “Compensation
 22 Movement Charts,” which dealt with average compensation by job title, not with compensation of
 23 individuals within job titles, were inadequate because they did not reflect a representative sample
 24 of job titles, they were consistent with a non-rigid wage structure, and even the handpicked,
 25 averaged job compensations “did not show that salaries moved together in every year.” *Id.* at
 26 36-38 & n.14. Many actually “moved in different directions.” *Id.*

27 Leamer presents new correlations and regressions. Each analyzes two types of data:

28 ¹ Defendants intend to preserve all prior arguments and evidence showing that Plaintiffs have failed to satisfy Rule 23 and that Leamer’s opinions are inadmissible.

1 average compensation by job title and average compensation of job titles grouped by “decile”
 2 (roughly speaking, one-tenth of each Defendant’s class members). All the analyses suffer the
 3 same basic flaws as Leamer’s first effort: the data Leamer used are improperly averaged to mask
 4 individual variation; analyses of individual and job title data contradict Leamer’s results; and the
 5 inferences Leamer draws from his statistical results are logically unsound and contrary to basic
 6 economic principles. As demonstrated below, Leamer’s opinions fail to satisfy Plaintiffs’ burden
 7 to show with “convincing proof” that impact can be shown for all or nearly all class members “in
 8 one stroke.” *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541, 2551, 2556 (2011).

9 **1. By Relying On Averaging In All Of His Analyses, Leamer Improperly**
 10 **Masks Substantial Variations In Individual Compensation**

11 Leamer begins by comparing *average* compensation by job title with *average* overall
 12 compensation for each Defendant. As expected, Leamer finds some correlation (“movement
 13 together over time”) between these two averages. This result is not surprising given that both
 14 averages would be affected by some factors common to compensation, such as company-wide
 15 changes triggered by pay freezes, industry level developments, and new product initiatives.
 16 Leamer 743:6-12; Murphy ¶¶ 12, 37-39.

17 Leamer then performs what he calls a “kind of a sensitivity analysis” on his correlations
 18 by using regressions to examine whether average compensation by job title is better explained by
 19 two “internal” variables (including average total compensation) or two “external variables” (such
 20 as percent changes in software jobs in the San Jose area). Leamer 570:13-571:9, 606:16-22,
 21 742:21-743:5. The regression exercise is “very limited in—in scope,” merely designed “to
 22 demonstrate that those correlations are not entirely misleading.” *Id.* at 528:23-529:14, 755:13-17.

23 But Leamer’s analyses reveal nothing about the critical issue that led the Court to deny
 24 class certification. By averaging the compensation of all employees who hold the same job title
 25 or fall into the same decile, Leamer necessarily wipes out the very thing he is supposed to be
 26 measuring—the significant variation in individual employees’ compensation. Such variations
 27 show that an impact on compensation for some employees would not “necessarily have resulted
 28 in an impact to all or nearly all employees.” Order at 43.

1 Leamer’s correlation of averages would reach the same conclusion regardless of whether
 2 all employees with the same job title received identical or vastly different compensation over time
 3 and whether their compensation moved in lockstep or in opposite directions. Leamer 785:25-
 4 788:16. As a result, average compensation by job titles would correlate with average overall
 5 compensation even if only a few employees in each job title were impacted while the rest were
 6 not. Almost all Defendants’ job titles contain numerous employees; some contain more than 500.
 7 Murphy II, App. B. If even a single employee in each job title saw increased compensation as a
 8 result of cold calls or for any other reason but the compensation of all other employees remained
 9 unchanged, Leamer’s model would still show positive correlation of all job titles to the class
 10 average. The average compensation in each job title would go up and the average compensation
 11 of the class would go up, even though there was no “ripple” or “sharing” at all from the few
 12 employees to the rest. By relying on averages, Leamer’s analyses are not even designed to
 13 address—and do not cure—the problems that led the Court to deny certification of the proposed
 14 Technical Class.

15 Leamer concedes as much: “I have chosen to work first with the title averages, because
 16 *the individual data is likely to be dominated by forces that operate at the individual level . . .*”
 17 Leamer II ¶ 19 (emphasis added). But these “forces that operate at the individual level”—such as
 18 the discretion of thousands of managers across the country who give pay increases to some but
 19 not to other employees—are the very factors Leamer must show do not predominate. Plaintiffs
 20 cannot meet their burden by simply assuming away forces that dominate at the individual level.

21 This kind of improper averaging has led courts repeatedly to deny class certification. In
 22 *GPU*, Judge Alsup denied certification because, as here, the plaintiffs’ expert “chose to *average*
 23 certain products and purchases with one another and then correlate instead of correlating
 24 disaggregated data for individual products and particular customers.” 253 F.R.D. at 493
 25 (emphasis in original). As Judge Alsup noted, “[u]sing such averages can lead to serious
 26 analytical problems” because they “can hide substantial variation across individual cases, which
 27 may be key to determining whether there is common impact.” *Id.* at 494 (quoting ABA Section
 28 of Antitrust Law, *Econometrics: Legal, Practical, and Technical Issues* 220 (2005)); *see also*

1 Paul A. Johnson, *The Economics of Common Impact in Antitrust Class Certification*, 77 Antitrust
 2 L.J. 533, 544 (2011) (“while an average may be useful for the fact finder’s merits determination,
 3 (e.g., how likely an effect of the alleged conduct was on average), it is completely unrelated to
 4 class certification”). By using averages, the expert “evaded the very burden that he was supposed
 5 to shoulder—*i.e.*, that there is a common methodology to measure impact across individual
 6 products and specific direct purchasers.” *GPU*, 253 F.R.D. at 493.²

7 For the same reason, the court in *Reed* denied class certification where the plaintiffs
 8 alleged the defendants conspired to suppress the wages of their registered nurse (RN) employees.
 9 The plaintiffs’ expert compared average wages to derive an average wage suppression for all
 10 employees in the proposed class. 268 F.R.D. at 590-92. The defendants in *Reed* produced
 11 evidence of variation in their employees’ compensation, including differences in wages and rates
 12 of change in wages over time. Finding the expert’s “first, and critical, flaw is his reliance on
 13 averages,” the court explained the “use of averages, when applied to these facts, unacceptably
 14 masks the significant variation.” *Id.* at 591-92. The “relative movements of mere *averages*
 15 (means) do not prove common impact to individual RNs. For example, mean wages for
 16 Defendants’ RNs could move together even though particular Defendants gave larger increases to
 17 certain, hard to find nurses, and smaller increases to others.” *Id.* at 592 (emphasis in original).
 18 The court concluded, “Even if one assumes the average wage was reduced by the alleged
 19 conspiracy, that would not mean that all members of the proposed class suffered a reduced wage
 20 or that any reduction for an individual nurse could be calculated in a formulaic way by common
 21 proof.” *Id.* at 590-91. The plaintiffs thus failed to meet their burden of showing a method
 22 “common to the class that can determine impact with respect to each class member.” *Id.* at 591.
 23 This same conclusion applies to Leamer’s approach.³

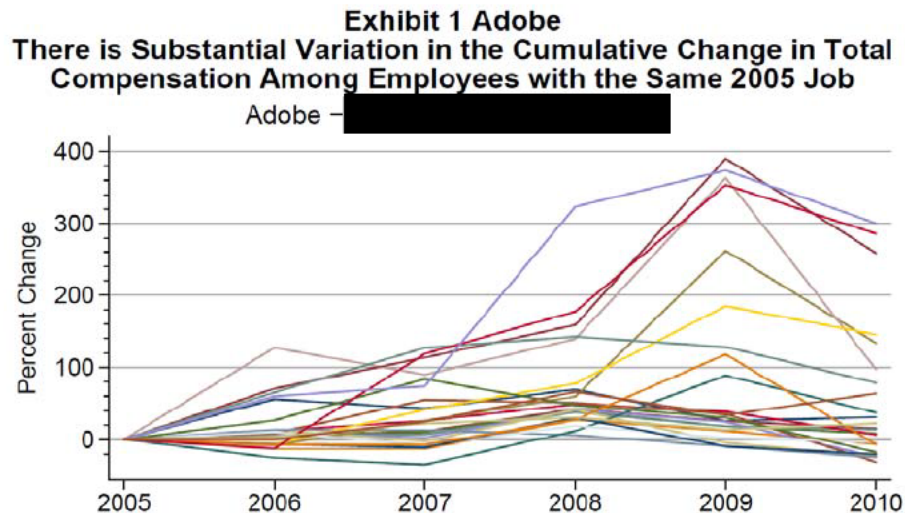
24 ² Just like Leamer, the expert in *GPU* asserted that considering individual data was unnecessary
 25 and that by averaging “one can reduce the individual differences in some of the dimensions that
 26 affect price.” *GPU*, 253 F.R.D. at 494. Judge Alsup rejected that excuse, holding it was the
 27 expert’s burden to show that individual differences “*could* be accounted for, *not* that individual
 28 differences could be ignored.” *Id.* (emphasis in original).

³ See also *Blades v. Monsanto Co.*, 400 F.3d 562, 573-74 (8th Cir. 2005) (evidence that alleged
 conspiracy increased average prices was insufficient to show common impact); *In re Flash*
Memory Antitrust Litig., 2010 WL 2332081, at *10 (N.D. Cal. June 9, 2010) (“looking only at an
 7 DEFS.’ OPP’N TO SUPPLEMENTAL
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2. The Data Leamer Ignores Show Broad Dispersion In The Levels And Changes In Individual Employees' Compensation

Leamer admits that individual variation “could matter” when answering the Court’s question, but claims it does not because “I think that that correlation of the average is going to carry over to the individuals unless the individuals are really unusual.” Leamer 789:18-790:22. Leamer studiously avoided testing this critical assumption. *Id.* at 794:9-12. Murphy, on the other hand, has carefully examined variation at the individual employee level. Murphy’s analyses demonstrate a broad dispersion in both the levels and changes over time in individual employee compensation. These results clearly show it is wrong to infer that an increase in compensation for some employees would “necessarily have resulted in an impact to all or nearly all employees.” Order at 43.

To begin, Exhibit 1 in Murphy’s report shows compensation changes over time of all employees who held a particular job in 2005 at each Defendant. Murphy II ¶ 14, Ex. 1. In year after year for each cohort, some employees’ compensation went up while other employees’ compensation went down. For example, the chart below shows the compensation over time for all Adobe employees who held the title “██████████” in 2005. Each line represents one employee.

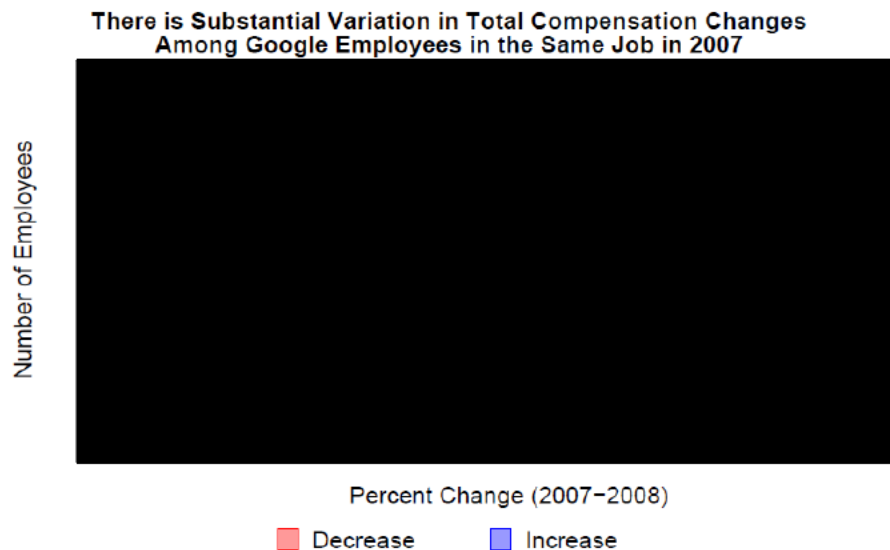


average price trend . . . obscures individual variations over time among the prices that different customers pay for the same or different products) (emphasis in original); *Somers v. Apple, Inc.*, 258 F.R.D. 354, 360 (N.D. Cal. 2009) (criticizing “aggregation of data” which “cannot be reliably applied to the complex product and pricing dynamic underlying the claims in this case”).

These data show that an increase in some employees' salaries does *not* result in an increase for all other employees, even when they hold the same job in the initial year. From 2005 to 2006, for example, a number of employees saw increases in compensation of more than 50%, while many other employees' compensation *dropped* during the same period. The following year, a number of those employees whose compensation increased substantially in the prior year saw their compensation drop, while other employees' compensation increased. This pattern of significantly different compensation outcomes among peers repeats throughout each of the five years depicted in the chart. By the end of the five-year period, some employees' compensation has increased *several hundred percent* from 2005, while many other employees' compensation has *dropped* over that time. These results are flatly inconsistent with a rigid wage structure that would propagate wage increases from some employees to all or nearly all the class.

The cohort of Adobe [REDACTED] employees is no outlier. Similar patterns are replete throughout the data. Exhibit 2 of Murphy's report shows the dispersion of compensation changes from 2007 to 2008 for all employees in the three job titles with the most employees at each Defendant. Murphy II ¶ 15. The chart below shows the changes in compensation from 2007 to 2008 of all Google employees holding the title Software Engineer III, the most populous job title at Google in 2007. This chart shows that [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]:



This same broad dispersion persists throughout each of the Defendants' employees, even after accounting for age, tenure, gender, and job title. *See* Murphy II ¶¶ 16-17 & Exs. 3-4. For example, the chart below shows the very wide distribution of compensation changes around the mean for all Apple employees from 2001-2011 after controlling for age, tenure, gender, and job title:

There is Substantial Variation in Total Compensation Changes at Apple after Adjusting for Individual Characteristics and Job Title



In the first round of briefing, Plaintiffs at least attempted to show there were only minimal differences in compensation among a few groups of similarly situated employees. Both examples showed just the opposite, demonstrating substantial dispersion of compensation. *See* Murphy II ¶ 18 n.13 & App. A. This time, Plaintiffs have not even tried to make such a showing. The reason is simple—Defendants' compensation systems are far from rigid compensation structures like “school teachers and firefighters” (Hallock ¶ 206) or a “civil service type system” (Leamer 771:14-772:5). Rather, they reflect the considerable discretion accorded thousands of managers across the country to make individualized compensation decisions for tens of thousands of proposed class members who have entirely different skill sets, experience, and performance levels. *See* Murphy II, Exs. 2-3 & App. B. Murphy's results show that Leamer's averages mask this reality.

The impact of this analysis is clear: Defendants substantially differentiate individual employee compensation within and across job titles, and compensation was not locked into such a tight grid that any movement in one part necessarily affected the rest. Just as managers had the

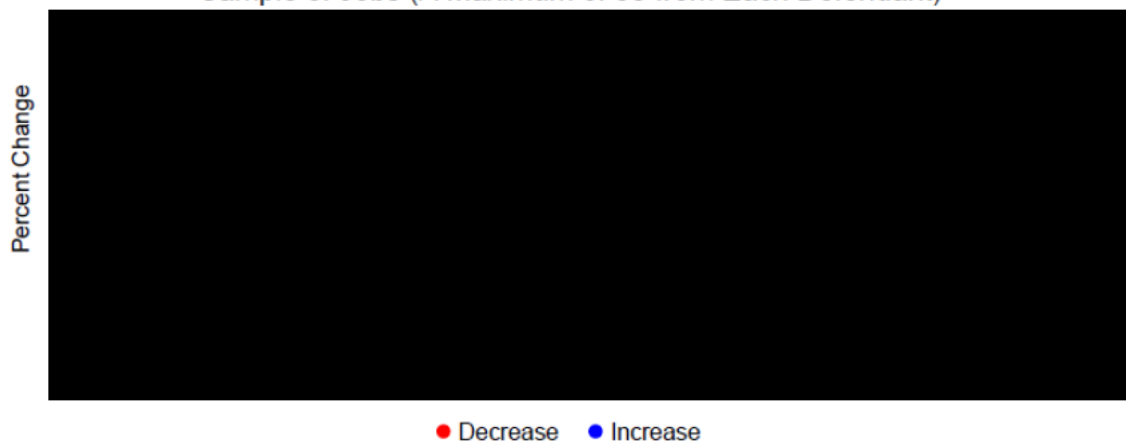
flexibility to differentiate for performance or other reasons, they had the ability to differentiate in response to cold calls. There is no reason to conclude that they would suddenly treat everyone the same in response to a (hypothesized) change in the number of cold calls to some employees. Any wage increases realized by some employees from additional inter-Defendant cold calling would remain with those employees whose individual characteristics warranted the increases. There would be no “ripple” effect within a job title and certainly not across job titles for all or nearly all class members. Because the existence and extent of any impact are inherently individualized, certification should be denied. *E.g., Fleischman v. Albany Med. Ctr.*, 2008 WL 2945993, at *6-7 (N.D.N.Y. July 28, 2008) (denying certification because “the wage of a particular nurse or class of nurses . . . involve[s] too many variables,” including “services provided,” “compensation and recruiting strategies,” and “performance and merit”); *In re Comp. of Managerial, Prof'l & Technical Emps. Antitrust Litig.*, 2003 WL 26115698, at *4 (D.N.J. May 27, 2003) (finding “employee ability to seek employment in other industries, salary history, educational and other qualifications are but a few of many factors that cannot be shown with common proof”) (internal quotation marks omitted).

3. Even Leamer’s Average Job Title Compensation Data Do Not Support Plaintiffs’ Theory Of Rigid Wage Structures

The same broad dispersion of compensation changes that exists at the individual level persists even at the average job title compensation level Leamer considers. Murphy previously showed the dispersion of changes in compensation for the top 25 job titles for each Defendant. *See* Murphy I, Exs. 18A & 18B. Murphy has expanded that analysis to show an even wider sample of up to 50 job titles for each Defendant over the entire period of data produced in this case (approximately the top 5 jobs in each decile for each Defendant from Leamer Figures 9-12). Murphy II ¶¶ 24-25 & Exs. 7-8; *see also id.* ¶ 23 & Ex. 5. Each dot in the chart below represents a different job title; a blue dot (those above the zero line) represents a job title in which the average total compensation increased from the previous year; a red dot (those below the zero line) represents a job title in which average total compensation decreased. In every year for each Defendant, the data show wide dispersion across job titles.

Exhibit 7
There is Substantial Variation in Annual Changes in
Job Average Total Compensation at Each Defendant

Sample of Jobs (A Maximum of 50 from Each Defendant)



In other words, while the charts in the previous section showed the broad dispersion of changes in employee compensation *within* each job title—*i.e.*, the Google Software Engineer III employees represent one dot on the chart above—this chart shows that there is also great dispersion of changes in average compensation *between* job titles. Thus, even if Leamer could have demonstrated that an increase in compensation for some individuals as a result of cold calls would have caused an increase in compensation for some other individuals within the same job title (he makes no such showing), there is no support for his theory that any such increased compensation would have spread to employees in other job titles.

4. Leamer’s Regressions Suffer From The Same Defects As His
Correlations And Cannot Demonstrate Classwide Impact

To test whether his correlations between average job title compensation and average total compensation “are not entirely misleading” (Leamer 528:23-529:14), Leamer performs regressions to determine whether “internal” or “external” variables are better at explaining average job title compensation increases. Leamer’s “internal” explanatory variables are (1) increases in average total compensation (“contemporaneous” compensation factor), and (2) the previous year’s average job title compensation relative to the previous year’s average total compensation (“lagged” compensation factor). His “external” variables are (3) the previous year’s average job title compensation relative to the previous year’s average revenue, and

(4) percent changes in software jobs in the San Jose area. Leamer II ¶ 34. According to Leamer, the results from this “very limited” exercise (Leamer 528:23-529:14) show that his chosen “internal” factors have a stronger effect on average job title compensation than his chosen “external” factors. From this, Leamer concludes the regressions find a “positive sharing effect” both “contemporaneously” and “over time” and “provide[] *support for internal relationships* across all Class titles at a firm *that would tend* to make impact of the agreements common to all Class members.” Leamer II ¶ 37 (emphasis added); *id.* ¶ 42 (“lagged” variable shows “corrective action” to effectuate “sharing” over time); *see also id.* ¶ 47 (decile regressions).

Leamer’s regressions are insufficient on their face and do not support even the highly qualified inferences he draws from them. First, the regressions say nothing about any effect on individual compensation because Leamer is, again, only looking at *average* compensation by job title and average relationships between those averages. By evaluating average compensation, the regressions ignore the significant variations in individual compensation patterns that undermine Plaintiffs’ theory that wage structures are so linked and rigid that increases for some employees would necessarily propagate throughout the class. *See GPU*, 253 F.R.D. at 494; Order at 43. Thus, whether his “internal” variables “explain” *average* job title compensation changes “better” than his “external” factors is meaningless to the question before the Court.

Second, Leamer’s regression is fatally flawed even for its limited purpose. As Murphy explains, Leamer’s “external” San Jose employment variable (along with other variables Leamer omits) obviously affects both average job title compensation *and* Leamer’s “internal” firm-wide average compensation variable, because the technology economy affects technology labor markets for specific job titles and the overall firm-wide average. Murphy II ¶¶ 41-44. Ignoring this “endogeneity” among his variables, Leamer improperly concludes that the “internal” variable meaningfully explains average job title compensation (the dependent variable) while the “external” variable does not. Leamer II ¶¶ 6-8. Because of this fundamental error, Leamer’s model is uninformative and his inference from it is unsound. Murphy II ¶ 44.⁴

⁴ As Murphy explains, Leamer is also committing a well-known “reflection” error, meaning (in general terms) that he cannot tell whether his variables are affecting each other or simply reflecting a common factor affecting both of them. Murphy ¶¶ 32-40. Leamer’s interpretation of

1 **5. Leamer’s Analyses Cannot, And Do Not, Address The Core Question**
 2 **Of Causation Underlying Plaintiffs’ Theory Of Classwide Impact**

3 Leamer’s proof also fails for the simple reason that his purported average “movement
 4 together over time” at most shows there are some common factors, both “internal” and “external”
 5 (including several Leamer previously identified (Leamer 838:5-21)), that affect both average
 6 overall compensation and average job title compensation. Even at his improperly averaged level
 7 of analysis, that does not begin to answer the relevant causation question—whether compensation
 8 for class members was so rigidly interlinked that a wage increase for some would cause a wage
 9 increase for substantially all. *See* Order at 19. Leamer’s statistical analyses simply cannot
 10 determine whether the average correlation he finds is the result of one group of employees’
 11 compensation changes causing changes for other groups or simply the result of some common
 12 factor that affects both firm-wide and average job title compensation. Leamer 840:6-13;
 13 Murphy II ¶¶ 32-40.

14 Leamer the academic offers a critical admonition in “WARNING: Causal Conclusions
 15 from Temporal Orderings” that Leamer the litigation expert ignores:

16 For valid causal conclusions, we need an experiment; we need a control
 17 group and a treated group. When all we have are non-experimental data,
correlation is in the data but causation is in the mind of the observer.

18 With only temporal orderings and no experimental evidence, we do what
 19 empirics do: *We rely on stories.* To each temporal ordering we attach a predictive
 20 narrative or a causal narrative or both. We draw firm causal conclusions from the
 21 temporal orderings when the causal narrative is compelling and when there is no
 equally compelling predictive narrative. *This is literature and wisdom, not*
science.

22 Leamer, *Housing IS the Business Cycle*, in *Housing, Housing Finance and Monetary Policy* 149,
 23 152 (2007) (emphasis added) (analogizing to causal “story” that bringing an umbrella prevents
 24 rainstorms). Here, Leamer’s “story” from his statistical analysis is that compensation changes for
 25 some employees cause changes for others—or, in his words, are “shared” with others—because

26 his “lagged” sharing variable is also misplaced. Leamer’s “lagged” sharing variable could simply
 27 reflect “reversion to the mean,” a commonplace statistical phenomenon unrelated to the
 28 “corrective action” Leamer hypothesizes. Leamer 528:7-16, 640:7-9, 695:3-6, 703:21-704:11,
 723:11-14; Murphy II ¶¶ 45-52.

1 of internal equity and a semi-rigid wage structure. But he admits he has no “experimental data”
 2 to exclude out other common factors, rather than “sharing,” as causing the correlation. Leamer
 3 492:22-24, 840:6-13, 841:4-11. Leamer’s story is, as he concedes, “not science,” so not
 4 admissible, and certainly proves nothing relevant to the question before the Court. *See Daubert v.*
 5 *Merrell Dow Pharm., Inc.*, 509 U.S. 579, 591-97 (1993) (only reliable science is admissible).

6 The fundamental error in Leamer’s inferences is easily proved. Murphy built a regression
 7 model that is substantively the same as Leamer’s model. Murphy used national average wage
 8 data by job for software engineers, paralegals, and farmers, and found, just like Leamer, that the
 9 coefficients on the so-called “sharing” variables—both contemporaneous and lagged—were
 10 positive and significant and the coefficients on the so-called “external” variables were not.
 11 Murphy II ¶¶ 54-58 & Exs. 10 & 11. Just like Defendants’ employees’ average wages, the
 12 average wages of software engineers, paralegals, and farmers are affected by some common
 13 factors—the strength of the economy, for example. But those groups’ compensations are
 14 obviously not “shared” in the sense that one group’s gains and losses cause other groups’ gains
 15 and losses. Therefore, it would make no more sense to infer from Leamer’s model that farmers
 16 and paralegals are “sharing” compensation gains or losses with each other than it would to infer—
 17 as Leamer does—that Defendants’ employees are. *Id.* ¶ 58.⁵

18 Leamer agrees economic theory must be tested against the facts. Leamer 562:19-24,
 19 820:21-821:13. Yet neither he nor Plaintiffs have ever articulated, much less offered evidence to
 20 demonstrate, any coherent explanation of how purported compensation “sharing” across the class
 21 actually worked. Leamer cannot explain how such “sharing” among his job title averages, even if
 22 it were valid, was or would have been actually transmitted to *individual employees*. *Id.* at 835:9-
 23

24 ⁵ Murphy also provides a regression model in which changes in daily temperature in Chicago are
 25 “explained by” changes in temperature in Milwaukee and the difference in temperature between
 26 Milwaukee and Chicago the previous day (the “lagged variable”). Murphy II ¶ 59. The estimated
 27 coefficient on the “lagged variable” is similar to the one that Leamer finds in his model. *Id.* ¶ 60
 28 Leamer’s inference that his “lagged variable” shows Defendants engaged in “corrective action” is
 as wrong as inferring that, when the temperature is higher in Chicago yesterday than it was in
 Milwaukee, there is “corrective action” that decreases the Chicago temperature. Both models
 simply illustrate the “reflection problem” and reversion to the mean. *Id.* ¶¶ 59-62; *compare*
 Leamer II ¶ 42; Mot. at 24.

1 836:23. Leamer speculates that “water-cooler” chatter could spread information from cold calls.
 2 *Id.* at 499:2-18. No evidence supports the idea that such localized conversations ever led to pay
 3 raises for anyone, let alone for tens of thousands of class members across the country. The named
 4 Plaintiffs never experienced such an effect and Leamer knows of no one who ever has. *Id.* at
 5 831:16-25; *see also* Devine 184:4-23; Fichtner 228:21-230:21; Hariharan 89:18-23. Leamer
 6 ventures that management could hear the chatter and decide to mandate a raise for everyone, but
 7 that would “depend on the circumstances.” Leamer 500:7-18, 502:20-25; 505:21-506:3. Again,
 8 he has no evidence to support this conjecture.

9 Leamer alludes to unspecified “corrective action” by firms to “shar[e] gains over time” by
 10 equalizing pay at a job title or decile level. Leamer II ¶¶ 8, 42, 46; Mot. at 24. But Leamer points
 11 to no evidence that such action (or any of his other “propagation mechanisms”) could or did
 12 occur, notwithstanding that cold calling and hiring from various sources leading to his claimed
 13 “price discovery” occurred “each and every day” at every Defendant before, during, and after the
 14 class period. Leamer 512:1-8, 638:13-640:9, 828:13-21, 834:13-19.⁶ There is no such evidence.
 15 Rather, the undisputed facts show Defendants did not set compensation at the decile or job title
 16 level; compensation was set by thousands of managers for the employees they supervised based
 17 on individualized factors such as performance, skills and experience.

18 By relying on averages, ignoring individual variations and refusing to test his hypothesis
 19 properly against the facts, Leamer cannot support even his weak conclusion that “relationships”
 20 within a firm would “tend” to make the impact of the agreements common to the class. Leamer II
 21 ¶ 37. But apart from its fundamental flaws, Leamer’s qualified opinion that there is a “somewhat
 22 rigid salary structure which *allows*” the impact to be spread across a firm falls far short of the
 23 Court’s Order requiring proof that wage structures “*would necessarily have resulted* in an impact
 24 to all or nearly all employees.” Leamer 532:13-25, 536:7-12, 565:25-566:7, 577:11-15, 625:23-
 25 626:2, 791:10-16, 805:13-17, 806:12-14, 808:2-4, 833:9-12, 835:14-17; Order at 43 (emphasis
 26

27 ⁶ Leamer suggests Google’s Big Bang somehow supports his theory, but he admits it was
 28 “unusual and unique,” and not an example of “corrective action.” Leamer 460:7-22, 834:20-
 835:2; Mot. at 24.

1 added). Thus, Leamer’s opinion is insufficient for the same reason the Supreme Court in *Dukes*
 2 rejected the expert’s testimony that Wal-Mart had a “social framework” conducive to gender bias.
 3 *Dukes*, 131 S. Ct. at 2553. Without evidence showing the supposed framework actually resulted
 4 in the hypothesized effect, the testimony is “worlds away from [the] ‘significant proof’” required
 5 for class certification. *Id.* at 2554.

6 **B. Hallock’s Report Does Nothing To Satisfy Plaintiffs’ Burden**

7 Hallock opines that Defendants have “formalized compensation systems” that “could
 8 lead” a pay increase for some employees to extend to others. *E.g.*, Hallock ¶¶ 45, 196. But
 9 saying pay raises “potentially” (*id.* ¶ 227) could have extended companywide does not satisfy
 10 Plaintiffs’ burden to show that the wage structures were “so rigid . . . that a detrimental impact to
 11 an employee with one job title would necessarily result in an impact to other employees in
 12 entirely different jobs.” Order at 36 (emphasis in original). On that question, Hallock is silent.
 13 He admits he was not asked to examine whether all or nearly all class members were actually
 14 impacted, and he has not answered that question. Hallock 22:22-23:20. He did no statistical
 15 analysis and did not examine Defendants’ individual-level compensation data. *Id.* at 19:8-14,
 16 140:6-10, 145:22-23, 156:7-10, 176:4-177:2. Despite access to the entire voluminous discovery
 17 record, Hallock does not identify a single instance in which a pay raise to one employee resulted
 18 in pay raises to other employees even in the same group or job title, let alone to substantially all
 19 class members.⁷ Like Leamer’s opinion, Hallock’s view that a “structure” was in place under
 20 which effects “could” occur is insufficient for class certification. *See Dukes*, 131 S. Ct. at 2554.

21 Hallock repeatedly declined to opine that a ripple effect would have occurred in
 22 circumstances plaintiffs hypothesize:
 23
 24

25 ⁷ Hallock suggests there may have been an instance where Intuit supposedly hired a new
 26 employee and then gave a raise to one other existing employee. Hallock ¶ 160. In fact, the new
 27 employee was an existing employee who got a raise when she was given a new position with
 28 greater responsibilities. Galy 215:15-216:13. The other employee got a raise because she was
 promoted into the position vacated by the promoted employee. *Id.* at 216:14-217:11. Thus, this
 has nothing to do with cold calling or with any ripple effect. Rather than indicating a common
 impact, these facts demonstrate the highly individualized nature of compensation decisions.

- 1 • “Q: If a manager at Intuit used a retention bonus to retain an employee, is it
2 your opinion that Intuit would then give every employee in the company a
raise? A: No.” Hallock 137:17-21.
- 3 • “Q: It’s your prediction that those raises would lead to higher compensation
4 for all or nearly all salaried employees at Intel? A: I didn’t—that wasn’t part
of my—I didn’t investigate that. I didn’t think about that prior to actually just
5 now.” *Id.* at 162:23-163:3.
- 6 • “A: An Adobe employee gets a raise after a cold call from Apple ...
7 Q: Would you predict that that [] would then lead to a raise to all or nearly all
technical employees? A: I wouldn’t necessarily predict that that alone would
do that.” *Id.* at 189:18-25.

8 Hallock’s opinion about the importance of “internal equity” (Hallock ¶¶ 110-91) is
9 similarly unhelpful and only undermines Plaintiffs’ theories. He cites documents and testimony
10 describing “internal equity” as giving similar pay to employees who are “performing exactly the
11 same way” (*id.* ¶ 119), “consider[ing] individual employees’ pay within a similar job and pay
12 range using the same type of skill sets” (*id.* ¶ 167), and paying employees “comparably to other
13 people with the same set of experience and same level of performance for doing, the same work”
14 (*id.* ¶ 173). A policy of giving similar pay to employees with the same level of knowledge,
15 experience and performance is inconsistent with Plaintiffs’ claim. As Stanford Professor Kathryn
16 Shaw, an expert in compensation, explains, this policy means not giving similar pay to dissimilar
17 employees, such as a higher performing employee who attracts a cold call and receives a higher
18 salary as a result. *See* Shaw ¶¶ 42-53. Thus, Hallock admits that he cannot say whether internal
19 equity would cause a pay increase to spread to others without knowing “what kind of work they
20 are doing. How they are doing. Among other things.” Hallock 193:11-12; *id.* at 184:13-14 (“I’d
21 want to think about that more carefully and know more about these individuals.”). This need to
22 examine individual circumstances is the antithesis of a common claim suitable for class treatment.

23 Hallock suggests pay effects may have rippled out through adjustments to a Defendant’s
24 salary range after certain “top” employees got a pay increase as a result of a cold call. *E.g.*,
25 Hallock ¶ 229. This assertion fails for several reasons. First, Hallock identifies no instance
26 where that actually happened. Second, he does not suggest any reason to believe that adjusting
27 the boundaries of a salary range would necessarily affect everyone within the range. The size of
28 the salary ranges to which he points—as much as \$100,000 for some jobs (*see* Hallock Figures 7,

10, 11, 17, 18)—provides ample room for adjustments that leave the bulk of employees in the range unaffected. Third, even if adjusting the pay range for a given job title affected everyone in that title, that still would not mean that each of the thousands of other job titles in the alleged class was similarly affected.

Finally, Hallock’s suggestion that classwide compensation effects could have occurred as a result of Defendants’ use of “external market data” (*e.g.*, *id.* ¶ 240) is insufficient. The market data some Defendants used was from a much broader group of companies than just the Defendants in this case. *See Shaw* ¶ 56. Hallock identifies no evidence suggesting this broad market information from dozens or hundreds of companies could have been affected by the alleged agreements. Indeed, he did not examine that question. But even if the data had been somehow affected, Hallock offers no reason to believe any such effect would lead to across-the-board salary changes for every employee in every job title. To the contrary, the evidence he cites refers to merely adjusting the target percentiles for specific job titles, not adjusting the salary of every employee in that title, let alone in every technical job title in the company. *E.g.*, Hallock ¶ 209; *see also Shaw* ¶¶ 57-59. Similarly, Hallock cites no evidence, or reason to believe, that any increase (or decrease) to a company’s overall compensation budget would be allocated out to every technical employee in the company, let alone to the entire class. *Shaw* ¶¶ 62-65.

C. Plaintiffs’ “New” Evidence, Which Is Mostly Old And Off Point, Does Not Support Their Theory of Classwide Impact

The Court invited Plaintiffs to show whether discovery taken since the first motion might “demonstrate how common evidence will be able to show class-wide impact.” Order at 45, 47. But Plaintiffs’ “new” evidence is either irrelevant to the question of classwide impact or qualitatively no different from evidence the Court already considered and held insufficient. None of it supports Leamer’s “theory of a rigid, linked wage structure.” *Id.* at 36 n.11.

Plaintiffs cite testimony about “bidding wars” and “pay structure” from “top executives.” But this testimony is specifically limited to the “San Francisco film industry” or “Northern California [film] community,” whose employees make up 2.3% of the class. None of the cited evidence applies to the far larger and unrelated Defendants in the semiconductor, software,

1 Internet search, and consumer electronics businesses. Mot. at 1, 6-7 (citing exclusively testimony
 2 from Pixar and Lucasfilm); *see also* Order at 24 (discussing the same evidence).⁸ None of this
 3 evidence speaks to “rigid compensation structures” through which one individual’s compensation
 4 increase would be transmitted to all or nearly all employees at a particular Defendant, let alone
 5 for the 97.7% of the class for whom no evidence is cited.

6 Plaintiffs’ lengthy description of the late Mr. Jobs’ alleged “intimidation, anger, and
 7 threats” has no relevance to classwide impact. Mot. at 8-9. As the Court held, Plaintiffs’
 8 argument that the challenged agreements were “focused” on some amorphous group of
 9 “technical, creative and research and development positions” (Mot. at 10-11) does not address the
 10 question whether common proof shows that “all or nearly all” of the 60,000+ employees of the
 11 putative class were impacted. Order at 36; *see also id.* at 27 (“the anti-solicitation agreements
 12 may have affected only a subset of Plaintiffs’ proposed Classes, which may or may not correlate
 13 to the proposed Technical Class”). Defendants’ efforts to enforce the agreements (Mot. at 12)
 14 might increase the odds that certain high-valued employees would not receive cold calls. But this
 15 has nothing to do with the existence of a rigid, linked wage structure required to show an effect
 16 on all or nearly all class members.

17 Big Bang (Mot. at 10) is also not new (*see* Order at 27) and does not support Plaintiffs’
 18 theory. No other Defendant followed Google’s lead or ever did anything similar. Plaintiffs cite
 19 Google’s suggestion that Big Bang “[REDACTED]
 20 [REDACTED].” Mot. at 10. But this is inconsistent
 21 with Leamer’s own sharing theory, which is expressly based on supposed “internal equity” and
 22 rigid compensation structures within a firm, not “external” or market-based factors, which he
 23 finds “more difficult to detect.” Leamer II ¶¶ 65-68. Catmull’s heavily edited testimony about
 24 the “special effects industry” is also irrelevant to Leamer’s internal equity theory (fn. 8, above),
 25 so Plaintiffs’ attempt to tie Big Bang to Catmull (Mot. at 10) links one non sequitur to another.

26 _____
 27 ⁸ Plaintiffs misleadingly excise Mr. Lucas’s reference to the “San Francisco film industry.”
 28 Lucas 194:14-15. They do the same thing in the opening line of their brief by quoting only the
 second half of Mr. Catmull’s deposition answer. Mr. Catmull was talking about “pay structures”
 in the “special effects industry.” Catmull 179:12-22.

Plaintiffs also fail to link any of the “new” evidence to the size and characteristics of the putative Technical Class. For example, Intel’s employees make up two-thirds of the putative class, yet Plaintiffs barely mention it. Mot. at 9. Of all Defendants, only Intel makes semiconductors. At least half of Intel class members—*more than one-third of the entire class*—work on the design and manufacture of semiconductors (and associated hardware). Shaw ¶ 47, n.19; App. F; Kahn Decl. Ex. 24; *see also* Leamer 817:18-24. Their knowledge and experience would have been of little or no interest whatsoever to any other Defendant. It is therefore no surprise that from 2001 to 2004—several years before there was any alleged cold-calling agreement between Intel and Google—[REDACTED] employees that Google hired came from Intel. Murphy I, App. 2A. Also, [REDACTED]
[REDACTED]
[REDACTED]. Shaw, App. G. [REDACTED]
[REDACTED]. McKell Decl. ¶¶ 8, 14; *see also* McKell 181:19-182:13. Finally, Plaintiffs and their experts ignore clear evidence, including testimony since the last hearing, that when Intel believed pay for a particular job title was too low, it would provide a special market adjustment (“SMA”) budget that managers could use to increase compensation for employees within that job title—without providing a budget for other job titles. *See* McKell 206:12-18. Therefore, the evidence is overwhelming, as one would expect, that the compensation for Intel’s highly disparate and geographically dispersed employees was not subject to a “rigid, linked wage structure.” Order at 36 n.11. Nor was the compensation at any other Defendant. *See* Shaw ¶¶ 16-73. Again, Plaintiffs have never even articulated a mechanism, let alone offered evidence, of how it could have been.

D. Amgen Does Not Reduce Plaintiffs’ Burden

Citing *Amgen Inc. v. Connecticut Retirement Plans & Trust Funds*, 133 S. Ct. 1184 (2013), Plaintiffs make the novel argument that they have satisfied the predominance requirement because their “only available theory of harm” is “only provable on a class basis” and their case will be over if their “proposed proof of class-wide impact fails.” Mot. at 5. This circular

1 argument fails for at least two reasons.

2 First, *Amgen* was a “fraud on the market” securities case in which all investors are
 3 presumed by law to rely on an issuer’s material statements. The Court held that the question of
 4 materiality was common to the class because materiality is, as a matter of law, determined by an
 5 objective standard equally applicable to all investors. *Amgen*, 133 S. Ct. at 1191. But that is not
 6 true regarding the antitrust impact alleged in this case. As this Court recognized, to meet their
 7 burden, Plaintiffs must establish by reliable evidence the existence of wage structures that rigidly
 8 interlink compensation so that a “detrimental impact to an employee with one job title” would
 9 “necessarily result in an impact” on employees in other job titles. Order at 36. Nothing in *Amgen*
 10 suggests Plaintiffs are relieved from the burden of making this evidentiary showing because they
 11 *believe* their current theory is provable only on a classwide basis. To the contrary, *Comcast*
 12 requires that Plaintiffs rigorously *prove* that their theory of impact can be established on a
 13 classwide basis, which—as this Court has found—requires reliable evidence demonstrating
 14 “rigid, linked” compensation structures. *Id.* at 36 n.11.

15 Second, it is not the case that Plaintiffs’ claims are only suited for class treatment. An
 16 employee who could show that she would have received a cold call absent the alleged agreements
 17 may pursue a claim without demonstrating the agreements had an impact on any other employee.
 18 Such an employee need not shoulder Plaintiffs’ burden of proving classwide impact.

19 **III. UNDER COMCAST, PLAINTIFFS CANNOT MEET THEIR BURDEN TO** 20 **CERTIFY THE CLASS**

21 **A. Plaintiffs Have Not, And Cannot, Show A Classwide Method To Calculate** 22 **Damages For Each Individual Class Member**

23 The Supreme Court’s recent *Comcast* decision holds that Plaintiffs must not only show
 24 proof of antitrust impact on a classwide basis, they must also produce a method “establishing that
 25 damages are capable of *measurement* on a classwide basis.” 133 S. Ct. at 1433 (emphasis added).
 26 Otherwise “[q]uestions of individual damage calculations will inevitably overwhelm questions
 27 common to the class.” *Id.* This separate requirement may be satisfied by a common method
 28 applicable to the class showing that damages for each class member “could feasibly and
 efficiently be calculated once the common liability questions are adjudicated.” *Leyva v. Medline*

1 *Indus., Inc.*, ___ F.3d ___, 2013 WL 2306567, at *3 (9th Cir. May 28, 2013).

2 While this Court has found that Plaintiffs have offered a model to show “generalized
3 harm” to the class as a whole (Order at 43), Plaintiffs present no method for calculating damages
4 for individual class members. Under Plaintiffs’ theory, the amount of damage, if any, to a class
5 member depends on highly individualized factors, such as the nature of her job, its relationship to
6 other employees who might receive cold calls, and relative performance. Yet Plaintiffs do not
7 offer even a general idea of how to identify and measure the relevant factors, much less an
8 efficient and feasible means of calculating individual damages. For his part, Leamer explicitly
9 disavows any ability to calculate the magnitude of wage suppression for any employee. Leamer
10 23:16-24:7. Leamer admits the “ripple effect as it goes through the firm is going to get smaller
11 and smaller as you get to employees who are more and more distant,” and “probably at some edge
12 it’s not detectable.” *Id.* at 549:3-22. He does not know where that edge lies and has not
13 performed the necessary “econometric analysis” to try to determine “how quickly or slowly the
14 ripple declined.” *Id.* at 549:23-550:5, 661:17-662:16, 688:20-689:4 (“some titles would be more
15 susceptible to revenue sharing than others”). Thus, Leamer admits his model cannot do what
16 *Comcast* requires. As a result, “[q]uestions of individual damage calculations will inevitably
17 overwhelm” common questions, and the class cannot be certified. *Comcast*, 133 S. Ct. at 1433.

18 **B. Under *Comcast*’s Standard Of Rigorous Proof, Leamer’s Conduct Regression**
19 **Does Not Show Generalized Harm**

20 In light of *Comcast*’s requirement of rigorous proof to satisfy Rule 23, and a question
21 raised about the conduct regression by the Court in the Order but not addressed by Leamer in his
22 supplemental report, the conduct regression should be revisited. For three reasons, the regression
23 is not a reliable model for showing even generalized harm or damage to the Technical Class.

24 First, the Court “encouraged” Leamer to address in “his next report” whether additional
25 variables were needed to account for correlation across employees (*id.* at 42-43 n.15), an issue of
26 even greater importance now that Leamer opines that compensation within a firm is highly
27 correlated. Nonetheless, Leamer’s supplemental report ignores the Court’s concern. Leamer
28 763:21-765:18. Without accounting for the correlation, Leamer’s model cannot reliably

1 determine or measure impact or damages. Murphy II ¶¶ 68-69.

2 Second, in his zeal to show “internal” factors “dominate” compensation (Leamer II ¶ 66),
3 Leamer has undermined his rationale for using a single conduct variable for all Defendants. That
4 variable assumes that the agreements would have the same impact on each Defendant, adjusted
5 only for average age and hiring rate. However, Tables 1 and 2 in Leamer’s supplemental report
6 show each Defendant’s compensation diverged significantly from the others (including moving in
7 opposite directions). A single conduct variable cannot account for the “internal forces” and other
8 Defendant-specific factors that Leamer contends drive disparate compensation outcomes.
9 Murphy I ¶ 115. Nor can a single conduct variable account for differences in impact that may
10 result from variations in each Defendant’s compensation strategies, the number and type of
11 agreements to which it was allegedly a party, the nature of its workforce and the relative
12 importance of cold calling for its recruiting needs. By lumping Defendants together, Leamer’s
13 single conduct variable obscures all of these differences. It improperly makes it appear (putting
14 aside other defects in the regression) that the alleged agreements had the same impact on each
15 Defendant subject only to controlling for age and hiring rate, when the actual impact, if any,
16 would have varied significantly.

17 Third, Leamer admitted at his recent deposition that he had no answer to one of Murphy’s
18 two sensitivity analyses that showed Leamer’s use of a single conduct variable masked critical
19 differences. Leamer’s reply declaration criticized Murphy’s first analysis for including too many
20 variables that he claimed “overwhelmed” the model. But Leamer had no answer to Murphy’s
21 second analysis, admitting his reply was silent because “[p]resumably I didn’t have comments to
22 make about it.” Leamer 771:12-13. The likely reason is that Murphy interacted the conduct
23 variable with each Defendant, making room for the additional Defendant-specific factors by
24 omitting interactions between conduct and age and hiring rate—variables that added little to the
25 explanatory power of the regression. Murphy I n.160 & App. 10. As Murphy explains,
26 Leamer’s model is so unreliable that adjusting it only slightly to account for Defendant-specific
27 factors produces the absurd result that three Defendants—Adobe, Lucasfilm and Pixar—
28 overcompensated their employees during the alleged conspiracy. Murphy II ¶ 69. Accordingly,

1 Leamer's conduct regression cannot reliably show generalized harm to the class.

2 **IV. THE SUPERIORITY REQUIREMENT IS NOT SATISFIED**

3 In denying class certification, the Court reserved ruling on whether Plaintiffs have met
 4 Rule 23's superiority requirement. Order at 46. The foregoing shows it is not satisfied.
 5 Plaintiffs' failure to show a common method for proving impact on all or substantially all 60,000-
 6 plus diverse employees, together with Plaintiffs' failure to show any means for calculating
 7 individual damages, means this case would be unmanageable as a class action. "If each class
 8 member has to litigate numerous and substantial separate issues to establish his or her right to
 9 recover individually, a class action is not 'superior.'" *Zinser v. Accufix Research Inst., Inc.*, 253
 10 F.3d 1180, 1192 (9th Cir. 2001). This case falls squarely within that description.

11 **V. CONCLUSION**

12 Plaintiffs' renewed motion for class certification should be denied.

13 Dated: June 21, 2013

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